Untitled Lab 1

2023-10-26

R Markdown

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see http://rmarkdown.rstudio.com.

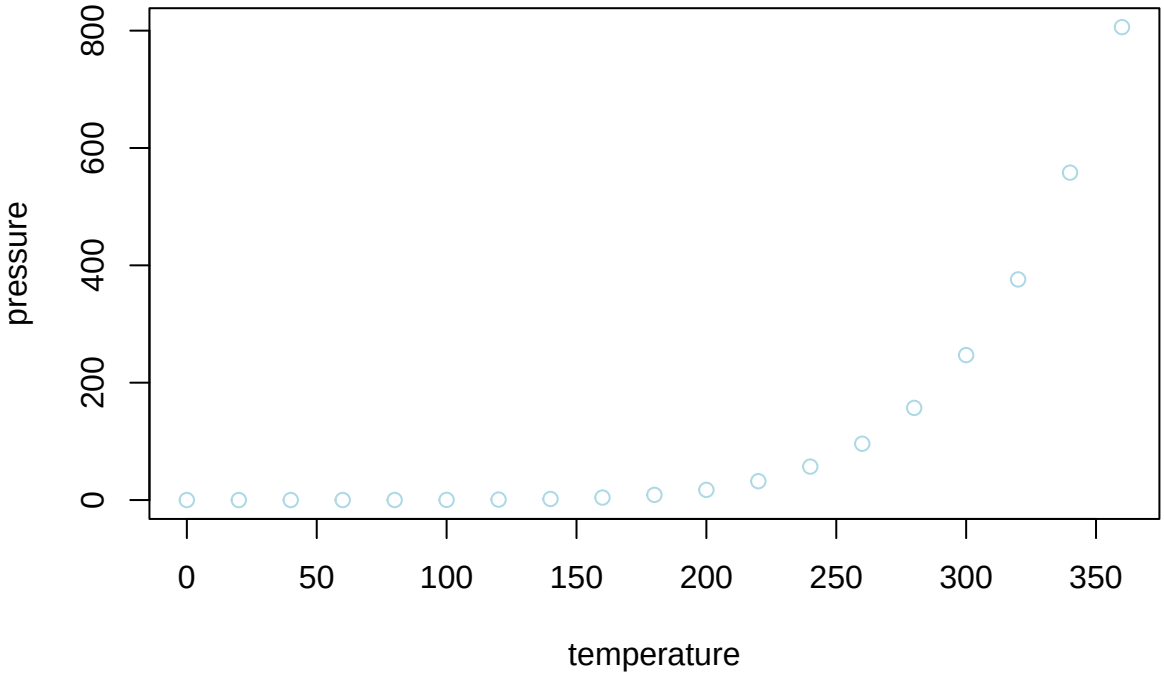
When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```
summary(cars)
```

```
##      speed           dist       
##  Min.   : 4.0   Min.   :  2.00  
##  1st Qu.:12.0   1st Qu.: 26.00  
##  Median :15.0   Median : 36.00  
##  Mean   :15.4   Mean   : 42.98  
##  3rd Qu.:19.0   3rd Qu.: 56.00  
##  Max.   :25.0   Max.   :120.00
```

Including Plots

You can also embed plots, for example:



setwd("/Users/suprya/Desktop/absenteeism+at+work/") getwd()

df = read.csv("Absenteeism_at_work.csv", sep=";", header = TRUE) #head(df)

Scatter Plot

plot(df$Weight, df$Height, xlab = "Weight", ylab = "Height", main = "Scatter Plot Height And Weight",col = "light blue")

Histogram

hist(df$Absenteeism.time.in.hours, main = "Histogram of Hours for the Absences", xlab = "Hours",col = "light blue")

Histogram

hist(df$Age, main = "Histo of Age of a Person of Each Absence", xlab = "Age")

Create a data frame with total hours by month

months <- unique(df$Month.of.absence)total_hours <- sapply(months, function(m)sum(df$Absenteeism.time.in.hours[df$Mo
== m]))

Bar Plot

barplot(total_hours, names.arg = months, xlab = "Month", ylab = "Hours", main = "Bar Plot Month",col = "lightblue")

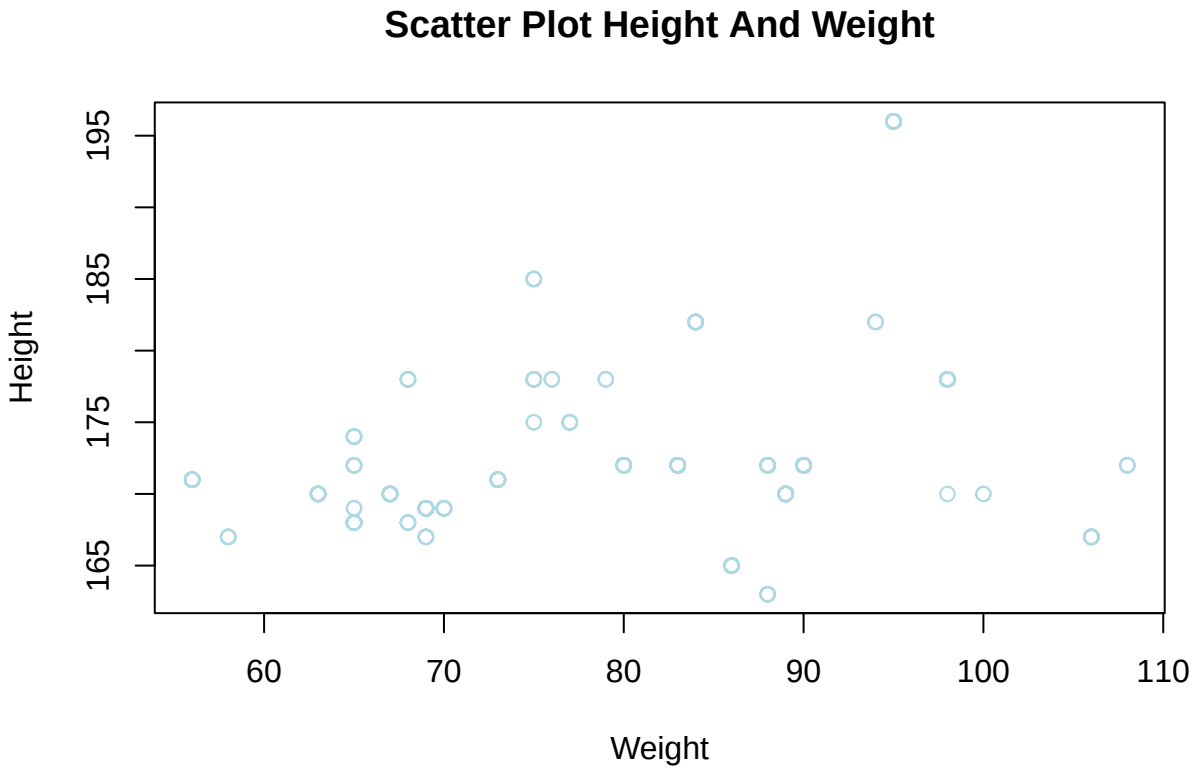
Box Plots

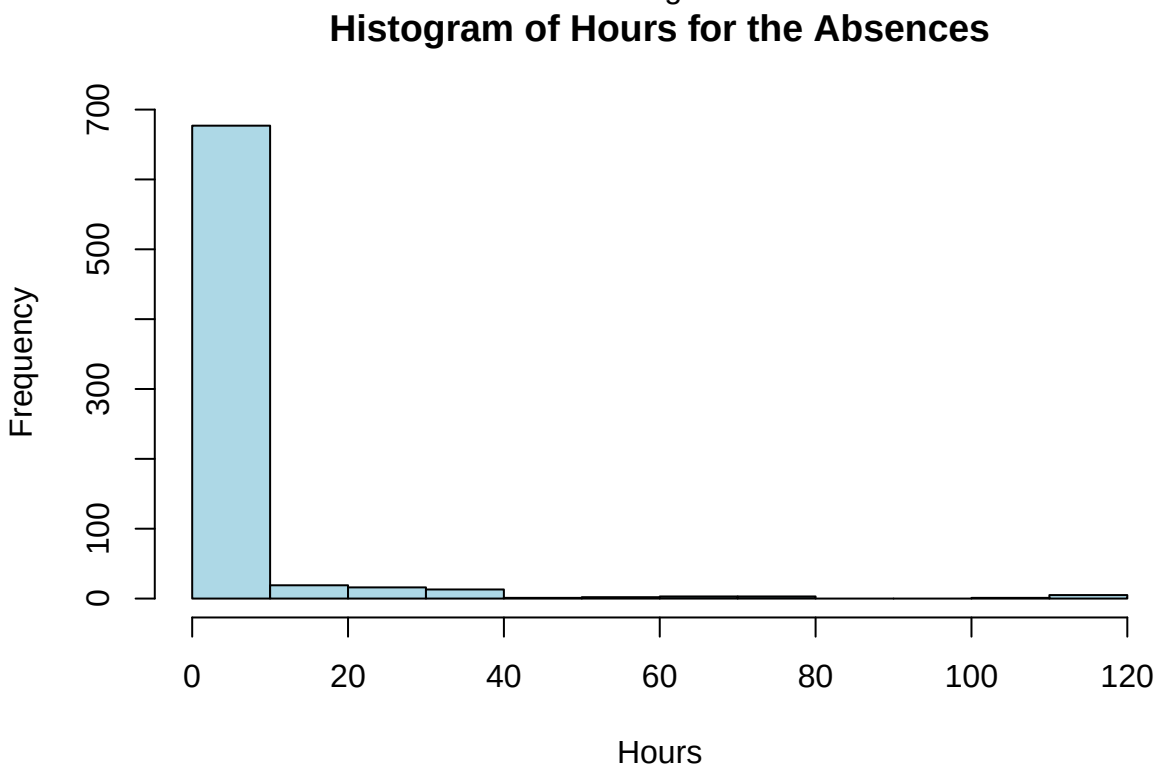
boxplot(Absenteeism.time.in.hours ~ Social.smoker, data = df, main = "Box Plots of Hors by S Smoker Var", xlab = "Smoker", ylab = "Absenteeism Hours", col = c("purple", "lightblue"))

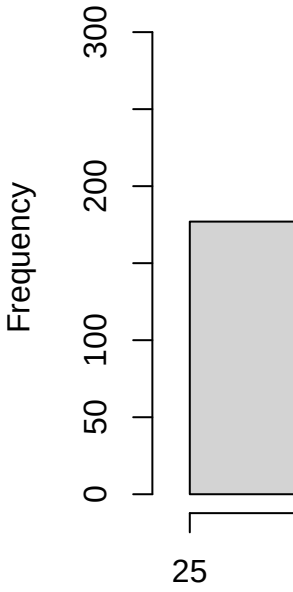
Box Plots

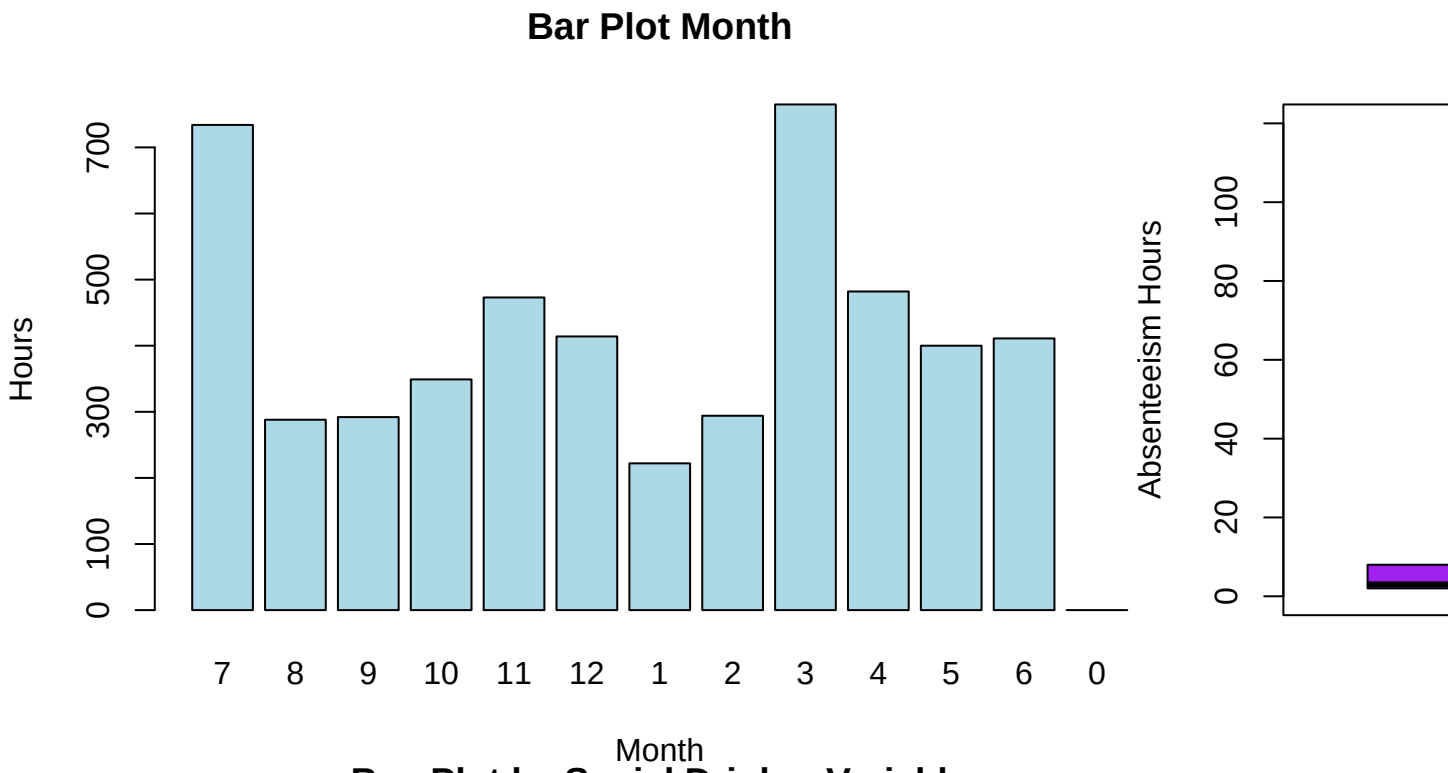
boxplot(Absenteeism.time.in.hours ~ Social.drinker, data = df, main = "Box Plot by Social Drinker Variable", xlab = "Social Drinker", ylab = "Hours", col = c("lightblue", "orange"))

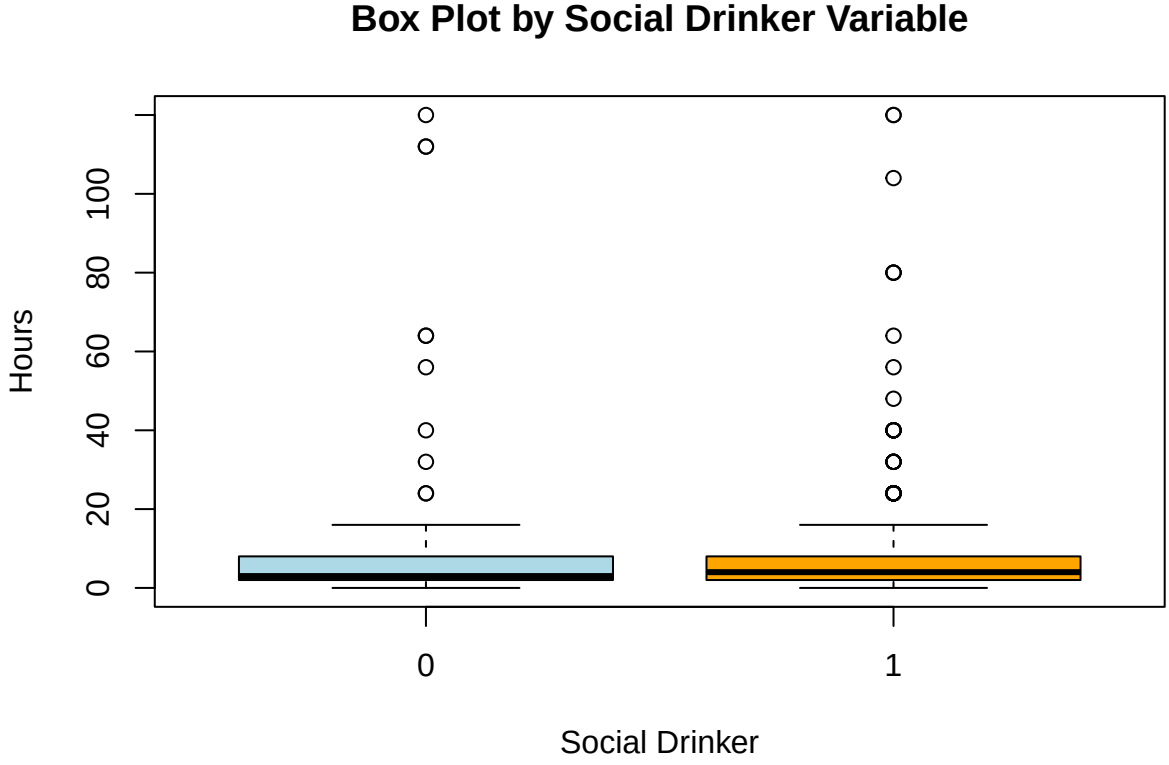
```
## [1] "/Users/suprya/Desktop/absenteeism+at+work"
```


Scatter Plot Height And Weight
Height
165
175
185
195
60
70
80
90
100
110
Weight


Histogram of Hours for the Absences
Frequency
0
100
300
500
700
0
20
40
60
80
100
120
Hours


Frequency
0
50
100
200
300
25


Bar Plot Month
Hours
0
100
300
500
700
7
8
9
10
11
12
1
2
3
4
5
6
0
Month
Absenteeism Hours
0
20
40
60
80
100


Box Plot by Social Drinker Variable
Hours
0
20
40
60
80
100
0
1
Social Drinker